

What is Claimed Is:

1. A personal information manager comprising:

a data input device receiving an audio data stream, and decoding the data stream into text;

a dialog manager having a record mode and a dialog mode, said dialog manager examining said decoded text received to determine whether it contains an explicit or an implicit

5 data processing request, said dialog manager immediately passing explicit data processing requests and queuing implicit data processing requests;

an information storage/retrieval module storing and retrieving data from a database, said information storage/retrieval module executing data processing requests specified by said dialog manager; and

10 an output module converting text received from said dialog module into speech and outputting said speech in response to a data processing request;

wherein said dialog manager passes implicit processing requests to said information storage/retrieval module during periods of inactivity.

2. The personal information manager according to claim 1, wherein said dialog manager identifies an explicit data processing request during said record mode by comparing said decoded text against a list of reserved words.

3. The personal information manager according to claim 1, wherein said dialog manager identifies an explicit data processing request during said dialog mode by comparing said decoded text against a list of predefined data processing requests, assigning a match score to each of said

5 predefined data processing requests and selecting said predefined data processing request having a highest matching score as said explicit data processing request.

4. The personal information manager according to claim 3, wherein if said highest matching score is less than a threshold score said dialog manager passes an instruction to said output module to prompt the user to select a given data processing request from among a selected number of said predefined data processing requests.

5. The personal information manager according to claim 1, wherein said information storage/retrieval module passes to said dialog manager a specified number of data records retrieved in response to said data processing request if a number of retrieved data records is below a threshold number and otherwise passes characteristic words selected from said retrieved data records, and said dialog manager instructs said output module to prompt the user to select a given said characteristic word used refine the data processing request.

6. The personal information manager according to claim 1, further comprising:
a global word table containing a list of all of the words stored in the database;
said dialog manager examining decoded text received from said data input device to determine whether it matches to a given said word in said global word table;
5 wherein a request for clarification is queued if the decoded text does not match any word in said global word table.

7. The personal information manager according to claim 1, further comprising:
a local word table;

said information storage/retrieval module stores atoms of data, each said atom having a unique identifier; and

5 said local word table containing a list of words contained in each atom of data and the number of times each word appears in a given atom;

 wherein if a number of atoms matching a data retrieval request exceeds a predetermined number, said dialog manager prompts a user to select a given characteristic word from a list of characteristic words, said characteristic words being derived from the local word tables of atoms
10 matching said data retrieval request, said selected characteristic word being appended to a search string of the data retrieval request, thereby reducing the number of atoms matching a data retrieval request.

8. The personal information manager according to claim 7, wherein said characteristic words are derived by selecting a predetermined number of the most frequently occurring words from the local word tables of the atoms matching a data retrieval request, provided that that the selected word does not already appear in the search string of the data retrieval request.

9. A method for refining a search string used to retrieve data from a database containing plural records of data, comprising:

maintaining a local table for each data record, said table including a list of words appearing in said data record and frequency value for each said word, where said frequency

5 counts a number of times said word appears in said data record;

selecting a predetermined number of said words whose frequency is above a threshold value from each of a plurality of said local tables;

prompting a user to select a given said word from said predetermined number of words;
and

10 adding said selected to said search string.